SUTTON (SURREY)

URBAN DISTRICT COUNCIL.

Annual Report

OF THE

MEDICAL OFFICER OF HEALTH

FOR

1909.

Public Health Committee.

J. WAKEFORD, J.P.
(*Chairman of the Council*).

R. W. WOOTTEN.
(*Chairman*).

S. CARPENTER.

A. R. DAGG.

C. R. C. GOSLIN.

G. H. HOOPER, M.D.

R. J. HUMPHRIS.

G. LEAVER.

Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

https://archive.org/details/b30437489

To the Chairman and Members of the Sutton (Surrey) Urban District Council.

GENTLEMEN,

In accordance with the Regulations of the Local Government Board, I present my Annual Report for the year 1909.

The population of the district, excluding those in public institutions, has been estimated at the middle of 1909 at 19630.

This estimate is based upon allowing 5·1 persons per house in 3849 inhabited houses, and gives an increase of 4144 persons since the last census, an excess of 645 above the increase shown between the census of 1891 and that of 1901.

The birth-rate for the year, 19·5 per 1000 persons living, is the lowest yet recorded for the district, and 41 per cent. below that for the decennial period 1878—1887 and 26 per cent. below the mean of the past thirty years.

With an estimated increase for the year of 590 in the population there were 22 less births than in 1908; and, seeing that there was an increase of 24 births attended by midwives and a decrease of 46 attended by doctors in 1909, it is evident that it is not amongst the poorest class that the check is most marked.

The death-rate was 9·9, and on three occasions only has the yearly rate been lower. This rate is 32 per cent. below the 1878—87 decennium and 19 per cent. lower than the mean of the past thirty years.

The mean annual rate of increase in the population by excess of births over deaths was 32 per cent. below the average for the past thirty years.

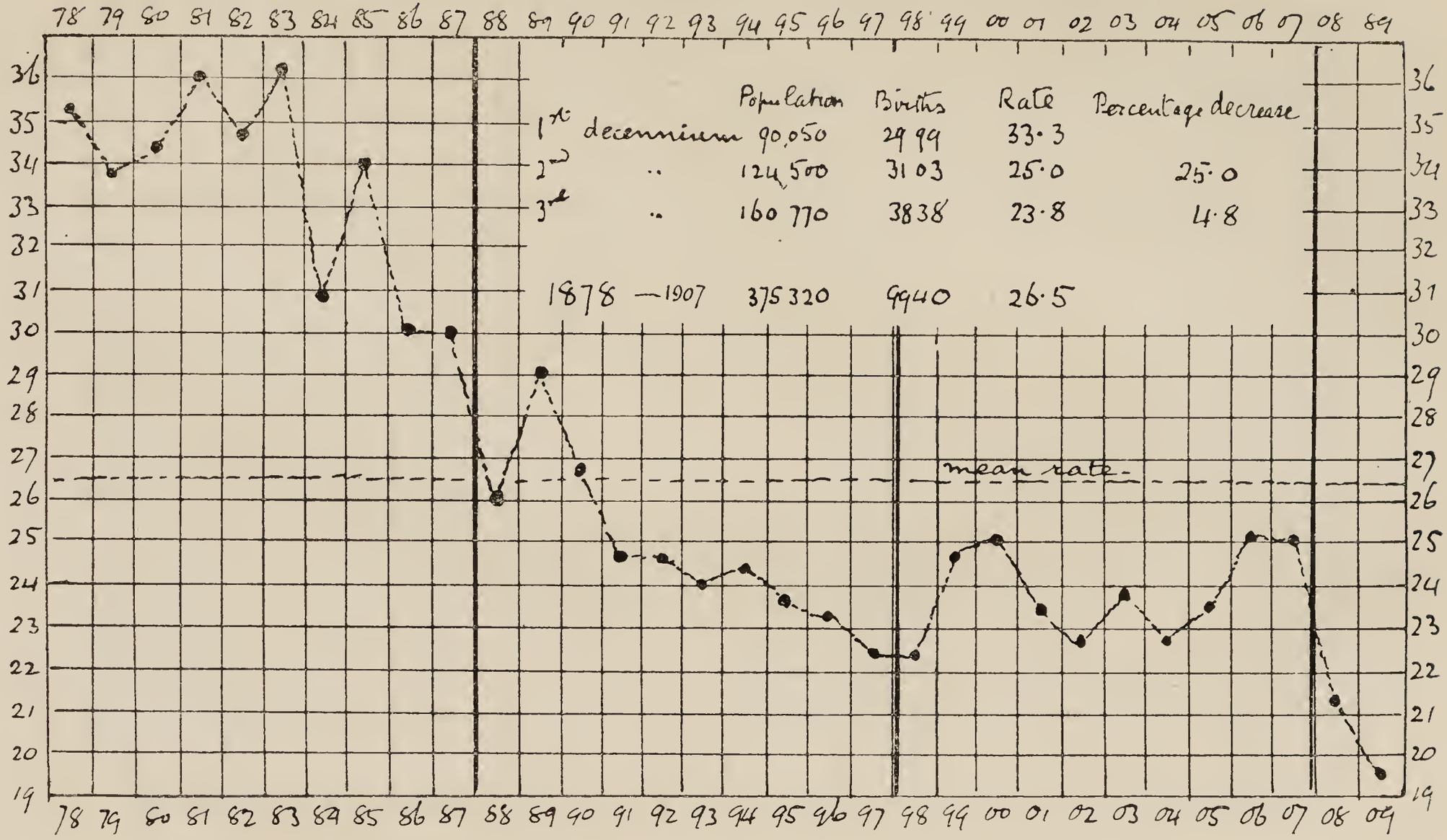
There were 25 deaths of infants under one year of age, the lowest number (with the exception of 22 in 1895) recorded in the past thirty-two years; but, owing to the lessened birth-rate, the proportion of deaths per 1000 births—65—is above the record—60—made in 1907.

The Zymotic death-rate for the seven principal epidemic diseases was 0·9 and 0·03 above the average for the previous ten years, whooping cough being the cause of one-half of the deaths registered.

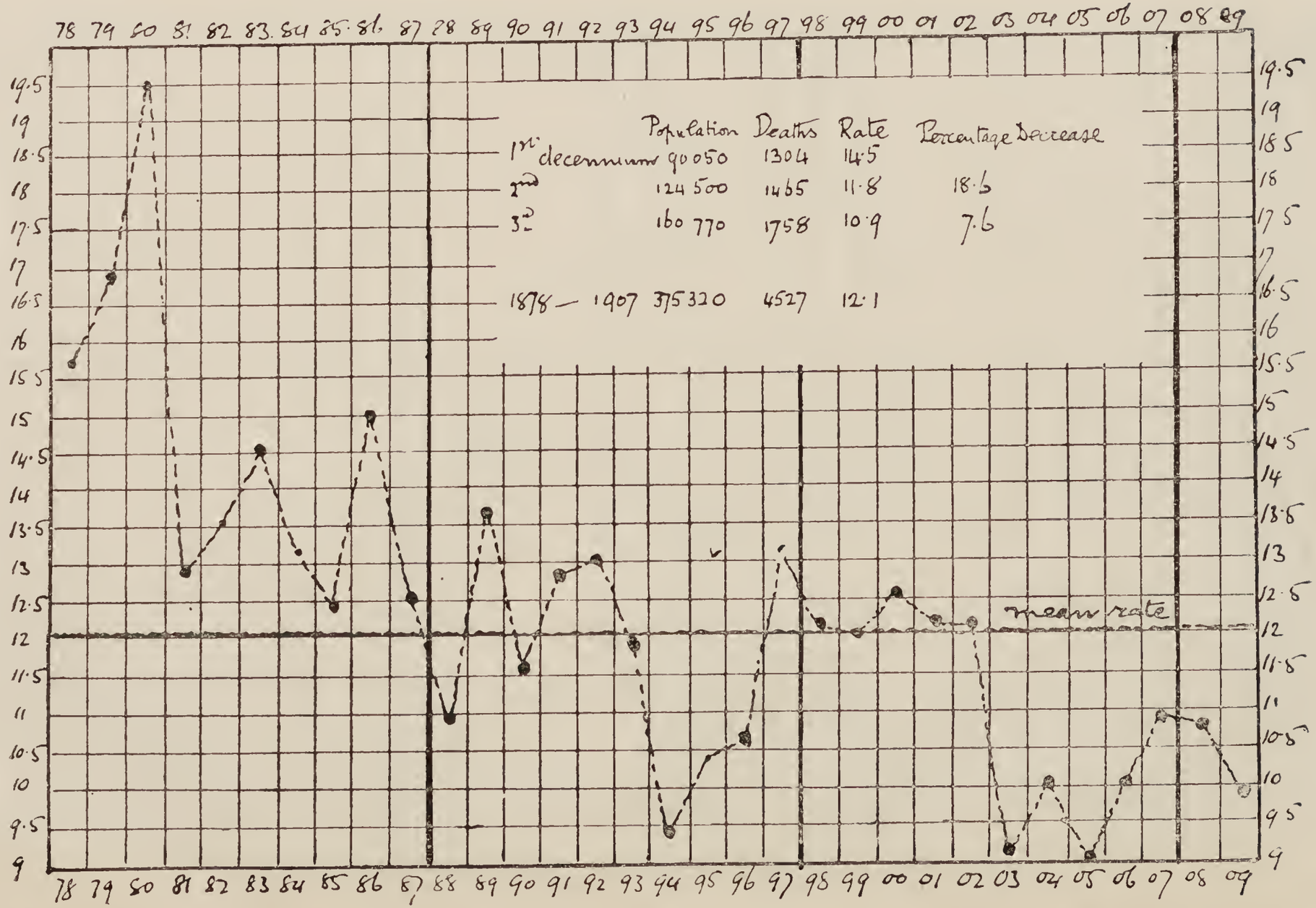
I desire to express my thanks to the Health Committee and to the officials of the Council for kind assistance given me in many ways.

I am,
Gentlemen,
Your obedient servant,
WILLIAM HABGOOD

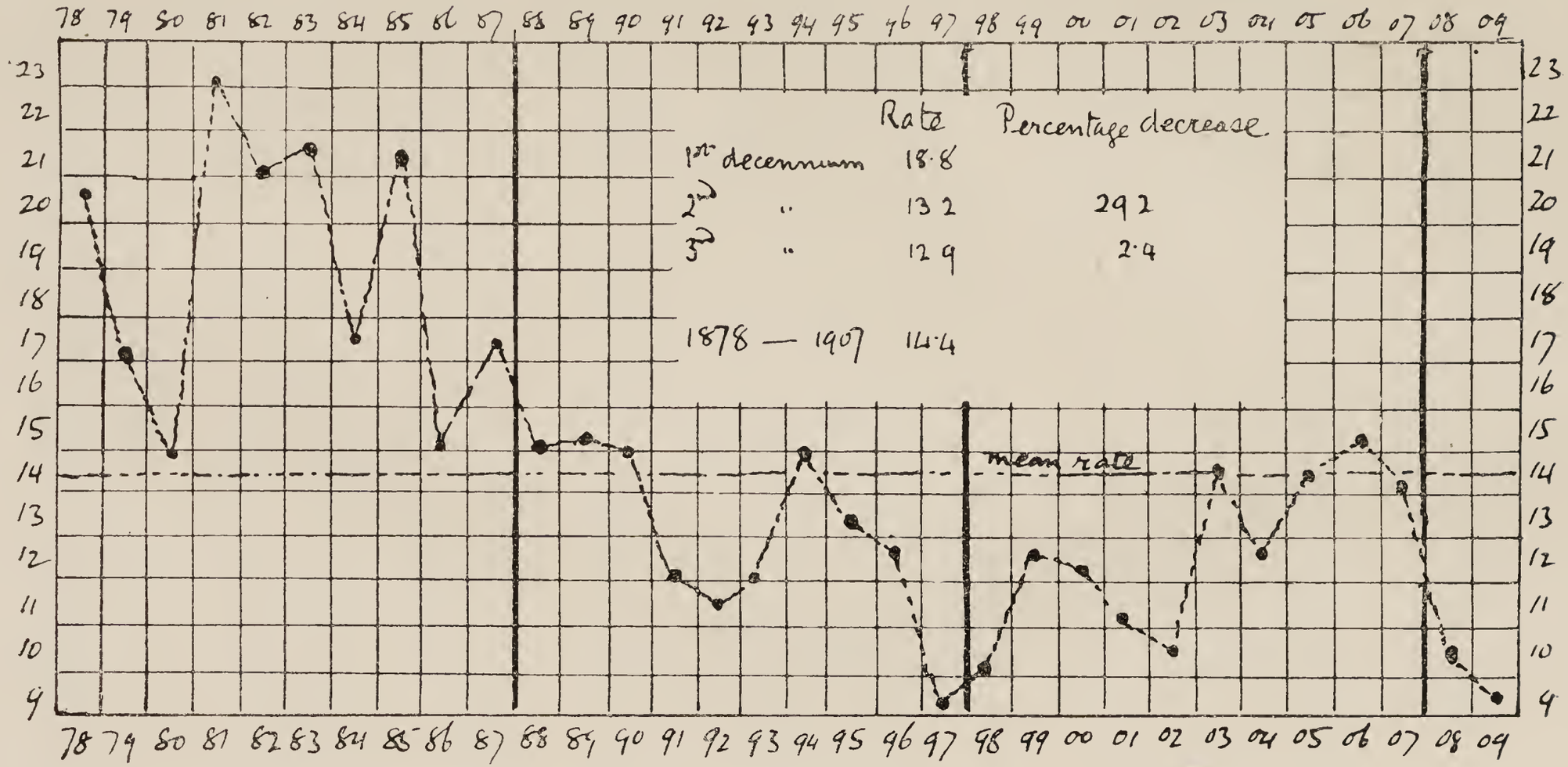
Birth-rate per 1,000 persons living for 32 years.



Death-rate per 1,000 persons living for 32 years.



Mean annual increase by excess of births over deaths per 1,000 persons living.



SUTTON URBAN DISTRICT.

Medical Officer's Report for the Year 1909.

Situation.—Sutton is situated 11 miles south of Whitehall in the watershed of the Thames in the north-east portion of the County of Surrey, the centre of the town being a little above the line where the chalk of the London Basin comes to the surface to form the North Downs. A narrow band of the London Tertiaries, running due east and west, appears between the chalk and the clay.

Towards the north and north-west and on the clay is the lowest land—81 feet above sea level—and through it runs the Pyl Brook, receiving the chief part of the surface water of the whole district and the outflow from the sewage works. The rest of the surface water drains into a small brook discharging on the north-east into the Wandle. Further north, where the London and Brighton Road crosses the border, the ground rises to 147 feet. This is the most rural part. Southwards, on the chalk, towards Banstead Downs, there is a gradual ascent to 293 feet.

Area.—The length of the district is three miles, and has an average breadth of one mile and an area of 1,836 acres or nearly three square miles.

Boundaries.—It is bounded on the north by Morden, east by Carshalton, south by Banstead, and west by Cheam, and on all sides, except where the towns of Sutton and Carshalton join, has a rural aspect.

Rateable value, £157,555.

Occupation of Residents.—A great part of the population is engaged in business in London. The

remainder consists chiefly of tradesmen and their assistants, gardeners, and those connected with the building trade.

Population.—No census having been taken since 1901 the nett population to the middle of the 1909 has been estimated upon the number of inhabited houses, 3,849. Allowing 5·1 persons per house the figure is 19,630, an increase of 590 since the middle of 1908.

At the same period there were 374 children and 106 staff in the Metropolitan Asylums Board Ringworm Schools; 951 inmates and 40 officers in the parish of Fulham Workhouse at Belmont; 26 inmates and 3 officers in the Diocesan Friendless Girls Home, "The Crossways"; and 32 children, 6 girls, and 7 nurses in the Rescue Home, "The Limes"*. These 1,545 added to the nett population give a gross population of 21,175, an increase of 1,373 above the figure for the previous year.

Year.	Gross population.	Nett population.	No. of inhabited houses.	No. per house on nett population.	Increase of nett population.	Increase of inhabited houses.
1881 (census)		8662	1514	5·5		
1891 (census)	13977	11987	2202	5·4	3325	688
1901 (census)	17224	15486	2976	5·2	3499	774
1909	21175	19630	3849	5·1	4144	873

Births.—~~There~~ 383 births registered, giving a rate of 19·5 per 1,000 persons living and the lowest rate recorded for the district.

* This Home was closed at the end of the year.

Deaths.—The number of deaths registered, excluding 80 belonging to other districts, was 163, and to these must be added 32 deaths of residents registered in Public Institutions beyond the district, viz.: 23 in Epsom Union Workhouse, 6 in the County Lunatic Asylum, 1 in Westminster Hospital, 1 in Cuddington Isolation Hospital, and 1 in St. Anthony's Hospital, Cheam. These 195 deaths are equal to a rate of 9·9 per 1,000 living and 1 per 1,000 below the rate for the previous year.

Sixty-six, or a little over one-third of the 195 deaths, occurred in persons over the age of 65.

65—69.	70—74.	75—79.	80 & upwards.	Total.
13	15	15	23	66

Infantile Mortality.—There were registered 58 deaths of infants under one year of age, but of these 25 only belonged to the district, and the infantile mortality expressed as deaths per 1,000 births was 65.

Once only has this figure been lower.

The other 33 deaths occurred as follows:—28 at "The Limes," a rescue home for unfortunates and their illegitimate children, this home is now closed.

Four at "The Crossways," a Diocesan Friendless Girls Home.

One at the Metropolitan Asylums Board School.

None of these infants belonged to Sutton, but as they have to be included in Column 5 of Table 1 of the Local Government Board, the infantile mortality figure on the total deaths registered under one year of age in the district appears as 151.

In order to show the actual birth, death, and infantile mortality rates for the district, I have added four columns (those that are unnumbered) to Table 1.

Inquests were held on 15 deaths, two of these being deaths in public institutions.

All the deaths, except two, were certified.

	Period.	Mean annual birth-rate per 1000 living.	Mean annual death-rate per 1000 living.	Mean annual rate of increase by excess of births over deaths per 1000 living.
Sutton.	1878—1887	33·3	14·5	18·8
	1888—1897	25·0	11·8	13·2
	1898—1907	23·8	10.9	12·9
	1909	19·5	9·9	9·6
England and Wales.	1878—1887	33·7	19·8	13·9
	1888—1897	30·4	18·4	12·0
	1898—1907	28·1	16·4	11·7
	1909	25·6	14·5	11·1

Annual Birth-rates, Death-rates, and the Death-rates from the Principal Epidemic Diseases.

1909.	Annual Rate per 1000 living.				Deaths under One Year to 1000 Births.
	Births.	Deaths.		Principal Epidemic Diseases.	
		Crude.	Corrected*		
England and Wales ..	25·6	14·5	14·5	1·12	109
76 great towns	25·7	14·7	15·6	1·42	118
143 smaller towns ..	24·8	13·9	14·5	1·08	111
England and Wales less the 219 towns	25·6	14·5	13·6	0·80	98
Sutton	19·5	9·9	?	0·90	65

* The corrected death-rates are the rates which would have been recorded had the sex and age constitution of the populations of the several areas been identical with that of England and Wales enumerated in the last census, 1901.

L.G.B. Table 1.—Vital Statistics of Whole District during 1909 and Previous Years.

Year.	Gross Population estimated to Middle of each Year, including residents in Public Institutions in the District.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett population estimated to middle of each year, excluding residents in Public Institutions in the District,	Birth Rate	Nett Deaths Registered in the District.			
				Under 1 Year of Age.		At all Ages.							Under 1 Year of Age.		At all Ages.	
		Number.	Rate per 1,000 of the gross population.	Number.	Rate per 1,000 registered Births	Number.	Rate per 1,000 of the gross population.					Per 1,000 of the nett population.	Number.	Rate per 1,000 registered Births.	Number.	Rate per 1,000 of the gross population.
1	2	3	4	5	6	7	8	9	10	11			12.		13.	
1899	16,990	366	21·5	51	140	160	9·5	2	2	18	15,000	24·4	51	140	176	11·7
1900	17,990	380	21·1	31	82	177	10·0	4	4	17	16,000	23·7	31	82	190	12·0
1901	17,310	367	21·2	43	117	175	10·1	8	4	20	15,572	23·4	43	117	191	12·2
1902	17,638	364	20·6	40	109	171	9·7	14	5	29	15,900	22·9	40	109	195	12·3
1903	17,168	388	22·6	32	82	131	7·6	10	3	22	16,200	24·0	32	82	150	9·2
1904	16,997	377	22·2	37	98	154	9·0	11	6	18	16,500	22·8	37	98	166	10·0
1905	17,512	395	22·5	34	86	138	7·9	10	6	18	16,800	23·5	34	86	150	8·9
1906	17,983	434	24·1	45	103	226	12·5	70	68	14	17,200	25·3	45	103	172	10·0
1907	18,355	443	24·1	27	61	211	11·5	46	42	23	17,600	25·2	27	61	192	10·9
1908	19,812	405	20·5	27	67	230	11·6	45	44	19	19,040	21·3	27	67	205	10·8
Average for the ten years.	17,775	392	22·0	37	94	177	9·9	22	18	20	16,581	23·6	37	94	179	10·8
1909	21,175	383	18·1	58	151	243	12.4	86	80	32	19,630	19·5	25	65	195	9·9

NOTE.—The deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums.

Area of District in acres (exclusive of area covered by water)	1836	Nett population at all ages	15,486	At Census of 1901.
		Number of inhabited houses	2,976	
		Average number of persons per house	5·2	

Institutions within the District receiving sick and infirm persons from outside the District.	Institutions outside the District receiving sick and infirm persons from the District.	Other Institutions, the deaths in which have been distributed among the several localities in the District.
1	2	3
Fulham Union Workhouse, Belmont	County Asylums	The Cottage Hospital, Sutton
Metropolitan Asylums Board Ringworm Schools	Epsom Union Workhouse	St. Anthony's Hospital, Cheam
Diocesan Friendless Girls' Home—"The Crossways"	Cuddington Isolation Hospital	The Westminster Hospital
Rescue Home for unfortunates and their illegitimate children —"The Limes"		
The Cottage Hospital.		

The Union Workhouse is in the Epsom Urban District.

L.G.B. Table III.—Cases of Infectious Disease notified during the year 1909.

Notifiable Disease.	Cases notified in Whole District.							Total Cases Removed to Hospital *
	At all Ages.	At Ages—Years.						
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	
Small pox..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..
Diphtheria including .. Membranous Croup ..	26	..	1	18	5	2	..	13
Erysipelas	12	1	..	1	1	9	..	..
Scarlet Fever	43	..	9	29	4	1	..	41
Typhus Fever	..	..	..	..	..	..	..	..
Enteric Fever	..	..	..	..	..	..	..	..
Relapsing Fever	..	..	..	..	..	..	..	..
Continued Fever	..	..	..	..	..	..	..	..
Puerperal Fever	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..
Totals	81	1	10	48	10	12	..	54

* Isolation Hospital, Sutton, Carshalton, and Leatherhead (Urban) and Epsom (Rural) Districts Joint Hospita at Cuddington.

Total available beds, 92. Number of diseases that can be concurrently treated, 3.

L.G.B. Table IV.—Causes of, and Ages at, Death during year 1909.

Causes of Death.	Deaths at the subjoined Ages of "Residents" whether occurring in or beyond the District.							Total Deaths in Public Institutions in the District.
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	
1	2	3	4	5	6	7	8	9
Chicken-pox	..	..	..	..	..	..	..	1
Measles	2	..	2	..	..	..	..	2
Scarlet Fever	2	..	1	1	..	..	..	..
Whooping-cough	9	5	4	..	..	..	..	4
Diphtheria (includ'g Membranous Croup)	..	..	..	..	..	..	..	..
Croup	..	..	..	..	..	..	..	..
Fever — Typhus	..	..	..	..	..	..	..	..
Fever — Enteric	..	..	..	..	..	..	..	..
Fever — Other continued	..	..	..	..	..	..	..	..
Epidemic Influenza	7	..	..	..	..	5	2	4
Cholera	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..
Diarrhœa	5	4	1	..	..	..	..	3
Enteritis	..	..	..	..	..	..	..	4
Gastritis	..	..	..	..	..	..	..	..
Puerperal Fever	..	..	..	..	..	..	..	..
Erysipelas	1	..	..	..	..	1	..	..
Phthisis (Pulmonary Tuberculosis) ..	8	..	..	..	1	7	..	1
Other tuberculous diseases ..	8	3	3	1	..	1	..	..
Cancer, malignant disease	15	..	..	..	..	9	6	..
Bronchitis	12	..	1	..	..	2	9	5
Pneumonia..	13	2	6	1	1	1	2	20
Pleurisy	..	..	..	..	..	..	..	..
Other diseases of Respiratory Organs ..	1	..	..	..	..	..	1	..
Alcoholism / Cirrhosis of Liver	2	..	..	..	..	2	..	..
Venereal diseases	..	..	..	..	..	..	..	2
Premature Birth	3	3	..	..	..	..	..	..
Diseases and Accidents of Parturition..	..	..	..	..	..	..	..	..
Heart Diseases	32	..	..	2	3	14	13	4
Accidents	5	1	..	2	..	2	..	..
Suicides	1	..	..	..	..	..	1	..
Cerebral hemorrhage	15	..	.	..	..	10	5	4
Chronic Nephritis	5	..	..	..	..	3	2	..
Old Age	20	..	..	..	..	..	20	5
All other Causes	29	7	4	..	4	9	5	21
All Causes	195	25	22	7	9	66	66	80

L.G.B. Table V.—INFANTILE MORTALITY DURING THE YEAR 1909.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1–2 Weeks.	2–3 Weeks.	3–4 Weeks.	Total under 1 Month.	1–2 Months.	2–3 Months.	3–4 Months.	4–5 Months.	5–6 Months.	6–7 Months.	7–8 Months.	8–9 Months.	9–10 Months.	10–11 Months.	11–12 Months.	Total Deaths under One Year.
ALL CAUSES—																	
Certified	3	1	..	1	5	5	2	2	..	2	1	..	1	2	2	2	24
Uncertified	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Common Infectious Diseases—																	
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-Pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	1	..	..	..	..	..	..	..	2	1	1	5
Diarrhœal Diseases—																	
Diarrhœa, all forms	..	..	..	..	..	1	..	1	..	1	..	..	1	..	..	..	4
Enteritis, Muco-enteritis, Gastro-enteritis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gastritis, Gastro-intestinal Catarrh	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wasting Diseases—																	
Premature Birth	1	1	..	1	3	..	..	..	..	..	..	..	..	..	..	..	3
Congenital Defects	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Injury at Birth	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Want of Breast-milk Starvation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Atrophy, Debility, Marasmus	1	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	3
Tuberculous Diseases—																	
Tuberculous Meningitis	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	2
Tuberculous Peritonitis: Tabes Mesenterica	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Other Tuberculous Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Causes—																	
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rickets	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Meningitis (not Tuberculous)	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Convulsions	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	2
Bronchitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Laryngitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Suffocation, overlaying	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
Other Causes	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
	3	1	..	1	5	5	2	2	..	2	1	1	1	2	2	2	25

Births in the year—
Legitimate 371.
Illegitimate 12.

Deaths from all Causes at all Ages 195.

Deaths in the year—
Legitimate Infants 23.
Illegitimate Infants 2.

Nett Population—Estimated to middle of 1909, 19,630.

Table showing the Death-rates per 1000 persons living for the seven principal Zymotic Diseases (separately and combined), for phthisis, and diseases of the respiratory system; also the infantile mortality rate per 1000 births, and the birth-rates and death-rates for three decennial periods.

(Sutton's Aggregate population, 375,320; births, 9940; deaths, 4527; and deaths under one year of age, 1045).

	Period.	Death Rate per 1,000 persons living.											Infantile Mortality. per 1,000 births.	Birth Rate.
		Smallpox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Measles.	Whooping Cough.	Diarrhœa.	The 7 principal Zymotic Diseases.	Phthisis.	Diseases of the Respiratory System.	All Causes.		
Sutton	1878-1887	0·01	0·32	0·35	0·11	0·38	0.48	0·50	2·20	1·24	1·93	14·5	109	33·3
	1888-1897	0·00	0·03	0·11	0·08	0·18	0·34	0·47	1·20	0·89	1·88	11·8	108	25·0
	1898-1907	0·00	0·07	0·08	0·02	0·14	0·24	0·45	1·08	0·90	1·57	10·9	100	23·8
England and Wales ..	1878-1887	0·05	0·48	0·14	0·22	0·42	0·49	0·77	2·6	1·8	2·8	19·8	143	33·69
	1888-1897	0·01	0·19	0·23	0·17	0·43	0·41	0·64	2·1	1·5	2·4	18·4	149	30·41
	1898-1907	0·01	0·12	0·22	0·13	0·34	0·30	0·72	1·8	1·2	1·6	16·4	142	28·10

	Notification Rate per 1,000 persons living.					Case mortality, or deaths per 100 cases notified.			
	Period.	Smallpox.	Scarlet Fever.	Diphtheria	Enteric Fever.	Smallpox.	Scarlet Fever.	Diphtheria.	Enteric Fever.
Sutton	1878-1887	0·24	4·6	1·39	0·43	18·2	7·0	26·0	25·6
	1888 1897	0·03	3·0	0·54	0·44	0·0	1·0	20·0	18·2
	1898-1907	0·02	3·4	1·19	0·19	0·0	2·2	7·0	9·7

Small-pox.—No case has been notified since 1902, and no death has occurred since 1882.

Vaccination.—During the year the proportion of children born returned as successfully vaccinated was 70 per cent. Last year the figure was 74. The population is gradually becoming less protected against small-pox.

Scarlet Fever. — Forty-three cases were notified, and the rate per 1,000 persons living—2·3—was 1·1 below the mean rate for the previous ten years.

Ninety-five per cent. of the cases were removed to the Isolation Hospital.

Two deaths were registered; these are the only deaths from this disease that have occurred in the past six years.

Thirty-three houses were invaded; 27 had one case, 2 had two, and 4 had three cases.

There were two instances in which cases discharged from the Isolation Hospital caused other cases to arise.

In the first the child left the Hospital suffering from a purulent discharge and infected others in the household within four days; in the second instance the child developed a purulent ear discharge three weeks after leaving the Hospital and then infected the three other children in the house who, although in close contact with the scarlet fever case up to the appearance of the rash and removal to Hospital, had previously escaped the disease.

Diphtheria.—Twenty six cases were notified, and the rate—1·3—was 0·11 above the mean rate for the previous ten years.

Fifty per cent. of the cases were removed to the Isolation Hospital.

No death occurred.

Twenty-two houses were invaded; 18 houses had one case and 4 houses had two cases.

The Council defrays the expense of a bacteriological examination of swabs (at the Lister Institute) brought to the Health Offices by medical men, and on the report of the bacteriologist depends whether these cases are notified and, perhaps, sent to the Isolation Hospital.

I stated in my report for 1908 :—"No bacteriological examination, however, is made before discharging cases from the Hospital; yet there is no evidence that fresh, or 'return,' cases have arisen from those discharged this year, nor is there any allusion made to return cases in the past reports of the Medical Officer of Health." This year an undoubted infection was caused by a purulent ear discharge arising in a child a month after her leaving the diphtheria ward of the Hospital, where she had been isolated 22 days.

The Joint Committee of the Hospital have at the present time under consideration the advisability of having bacterio-scopic examinations made of the throat, nose and ear (if inflamed) of convalescents before their discharge from the Hospital, as is the practice in the hospitals of the Metropolitan Asylums Board, and is recommended by the Principal Medical Officer of the Local Government Board and the Chief Medical Officer of the Education Authority in their recently issued memorandum on "Closure and exclusion from School."

Enteric or Typhoid Fever.—No case has been notified.

Measles.—Two deaths were registered.

Whooping Cough.—Nine deaths were registered.

Five of these were of children under one year of age and 4 between one and five years. The rate --0·46—is only 0·02 below the highest mean decennial rate (0·48 in the period 1878—87) in the past thirty-two years.

Diarrhœa.—Five deaths, equal to a rate of 0·25 per 1,000 were registered.

Four of these were in children under one year of age.

Estimated as deaths per 1,000 births the rate is 13. This figure is 5 per 1,000 below the mean for the previous thirty years.

Zymotic Diseases.—Taking these seven principal zymotic diseases as a whole there were 18 deaths, equal to a rate of 0·9 per 1,000 persons living and 0·03 above the mean of the previous ten years.

Methods of Dealing With Infectious Diseases.—On receipt of a notification of an infectious disease the house is forthwith visited by the Medical Officer of Health and Sanitary Inspector, the case, where possible, removed to the Isolation Hospital, and the disinfection of the house carried out. All infected clothing remains in the sick room, which is sealed until the following day, when it is removed to the Isolation Hospital for steam disinfection.

On the notification of a case in a house where there are children attending either Day or Sunday Schools notice is sent by post to the Head Teacher, to the Attendance Officer of the Day Schools, and to the Manager of the Sunday School.

Sutton, Carshalton, and Leatherhead Urban Districts and Epsom Rural District, with, in 1908, an estimated population of 58,140, have an Isolation Hospital at Cuddington, under the management of a Board of representatives of the four Councils. The Hospital receives cases of Scarlet Fever, Diphtheria, and Enteric Fever, and has, I have been informed, accommodation for 92 beds, of which number about 46 are in general use.

Pulmonary Tuberculosis or Phthisis.—Eight deaths were registered, giving a rate of 0·4 per 1,000, and less than a half the mean death-rate of the previous ten years.

Method of Control.—The coming into force at the beginning of the year of the Public Health (Tuberculosis) Regulations, 1908, whereby notification to the district Medical Officer of Health of cases of phthisis occurring amongst those in receipt of parish relief, and of their passing from one district to another is demanded of poor law officials, enables the Medical Officer of Health to visit and advise upon the best means obtainable both for the good of the persons affected and for the prevention of the infection passing to others.

Nine cases were so notified during the year.

The Council adopted a system of voluntary notification on March 31st and two cases were so notified.

The only certain accommodation beyond their homes for isolation and treatment of these cases is at the Union Workhouse Infirmary.

Other Tubercular Diseases —Eight deaths were registered, a rate of 0·4 per 1,000.

Puerperal Fever.—No case of Puerperal Fever was notified.

Supervision of Midwives.—The County Council is the Local Supervising Authority for the Midwives Act of 1902, and has arranged with this Council to allow its Medical Officer to perform the following duties :—

To receive from the midwife notice of death of mother or child ; of a still birth ; and of sending for medical help ; to inspect midwife's case book, bag of appliances, place of residence, and mode of practice ; and to send during January to the County Medical Officer of Health a report relating to the provisions of the Act, and the action he may have taken thereunder during the previous year.

This method has undoubtedly afforded the Medical Officers of Health valuable opportunities of obtaining immediate and direct information of one important branch of the Public Health Service, more especially in districts where the Notification of Births Act is not in force.

The County Council, however, have appointed a female inspector to act for all the districts under its control, and terminated the arrangement with the district Medical Officers of Health.

There were 10 registered midwives practising in 1909, and 52 per cent. of the births were attended by them.

Influenza.—Seven deaths, a rate of 0·305, were registered.

Erysipelas.—Twelve cases were notified, and one death was registered.

Cancer & Malignant Disease.—Fifteen deaths, a rate of 7·6, were registered. It is of interest to observe how steady the proportion of deaths from cancer has been to the total deaths. For the last ten years the average is 8·2 per cent.; the highest rate being only 1·1 above and the lowest 0·4 below this figure.

Diseases of the Respiratory System, Excluding Phthisis.—Thirteen deaths from pneumonia and 12 from bronchitis were registered, giving a rate of 1·2 per 1,000 and 0·37 below the mean of the previous ten years.

Milk Supply.—The greater portion of the supply comes from outside the district, the average number of milch cows examined quarterly by the Council's veterinary surgeon being only 127.

Some of the cowsheds were built in the days when the importance of good lighting, ventilation and drainage were not considered; these are gradually being improved, but the best constructed buildings can be rendered unhealthy when the openings are closed by cowkeepers who consider the warmth of the air in the shed more important than its purity.

The Highland and Agricultural Society of Scotland have recently made experiments showing that cows kept in open sheds at all seasons of the year give more and better milk, and keep healthier than those kept in warmer and less well ventilated sheds.

Overcrowding and bad air is as much a cause of tuberculosis in cattle as in human beings.

Greater care has been taken in the past year in grooming the cows; still the collecting of absolutely clean milk is rarely achieved, and I repeat what I stated in my last report, that it is not a safe food until sterilised by heat.

The Board of Agriculture, whose Tuberculosis Order of 1909 came into force on 1st, January, 1910, states in its circular notes to Local Authorities: "It must now be accepted as a fact that Tuberculosis is transmissible by the agency of milk used for human consumption," and it states further that the Local Government Board concurs in this view.

Since the London County Council General Powers Act, 1907, came into operation, out of 1930 samples of milk taken by the London County Council at the various London railway termini from churns consigned from the country, 9·6 per cent. proved to be Tuberculous.

An excellent example of the efficacy of boiling milk in preventing epidemic disease is found in the recent experience of a London Institution which received infected milk from the same farm from which consignments caused a widespread outbreak of scarlet fever in this county.

The rule in the Institution was that no milk should be given to the inmates until it had been boiled. The staff, however, preferred to take it raw, with the result that several of them were attacked with scarlet fever. Not a single case occurred amongst the inmates, although many of them were children and invalids and therefore more susceptible than the staff.

The Council employs a Veterinary Surgeon to inspect all the cows in the district and make quarterly reports. Mr. Vincent's reports gave an average of 127 cows inspected quarterly and no case of tuberculous disease of udder discovered.

While Tuberculous disease of the udder is probably the most common source of tuberculous

milk, it is an accepted fact that cows showing no sign of udder disease may produce milk containing the germs of Tuberculosis.

Sale of Food and Drugs Act.—The administration of the Sale of Food and Drugs Act, so far as the taking of samples is concerned, is carried out by the Inspector of Weights and Measures of the County Council.

Details of the results of taking samples in this district, as separate from other districts, are not supplied by the County Council.

Other Foods.—The only unsound foods dealt with have been fish and vegetables brought by tradesmen and hawkers to the Health Office. Such, as after examination have been found to be unfit for food, have been condemned and disposed of by the Department.

Bakehouses.—There are 14 bakehouses. These have been regularly inspected and found to be satisfactory. There is no underground bakehouse.

Slaughterhouses. — There are 6 slaughterhouses and they have been efficiently inspected and generally found in decent condition.

The greater part of the meat consumed is from animals slaughtered outside the district.

House Accommodation. — House accommodation for the working classes has become yearly more adequate, the 1881 census showing 5·5 persons per house, that of 1891 5·4, and of 1901 5·2; and it has been estimated that there were not more than 5·1 per house in 1909; but there is an insufficient supply of separate dwellings of a rental within the means of the labouring classes, so that in many

instances these and their families have to share with another family, cottages which are not designed for this purpose.

Occasionally cases of overcrowding arise, especially when there is scarcity of employment, and prolonged unemployment means for this class either overcrowding or the Workhouse.

Bye-Laws as to Houses Let in Lodgings.—The Council passed in 1902 Bye-laws as to Houses let in Lodgings. Registration of such houses, however, has not been enforced, but inspection has been carried out, and there has been only very rarely any difficulty in getting notices for amending defects and nuisances complied with.

Greater difficulty is encountered in dealing with careless tenants than with owners, and the health department finds the amending of ordinary nuisances a simple matter compared with the cleansing of houses, bedding, and clothes infested with vermin.

Water Supply.—The water supply is from deep wells in the chalk just above the strip of London Tertiaries and situated in the town. The Sutton District Water Company is bound by Act to soften the water to not less than 9 degrees of hardness, and it has been found by frequent analyses made at the Health Office that this standard was rarely exceeded.

Recent analyses carried out by experts engaged by the District Council have shown the chemical and bacteriological purity of the water to be of a very high standard.

Sewerage and Drainage. — The district is sewered, except with regard to a few houses in the outlying rural and sparsely populated parts on the clay, where cesspools are still in use and emptied from time to time by the Health Department.

The sewage is treated by contact beds, sprinklers, and—a small part—by broad irrigation.

Two percolating filters with rotating sprinklers are now in use, and at the completion of a third in March, 1910, treatment of sewage by irrigation will cease.

There is a separate system of sewers for storm water which is being extended yearly.

Except in rare instances in the rural parts, where excreta can be treated on the dry earth system, waterclosets are in use.

There are 8 cesspools in the chalk, some belonging to houses with drains lower than the sewer level, and plans for dealing with this difficulty are being considered.

During the year the house drain from 1 cesspool in the chalk has been connected with the sewers.

Removal of House and Trade Refuse and Stable Manure.—The removal of house and trade refuse is carried out by the Council's servants under the direction of the Sanitary Inspector, the refuse being tipped in situations least likely to cause offence.

When, as in warm weather, the prevalence of flies is evident, a layer of chloride of lime is spread over the refuse heaps.

Stress has been laid upon the importance of the weekly removal of manure, as required by the bye-laws, of owners of stables, and especially in warm weather, as horse manure forms the favourite breeding place of flies.

It would be well if nursery gardeners would avoid, as far as possible, the collection of large heaps in the warm season of the year.

Nuisances.—Most of the owners of property are ready to carry out the necessary steps for the abatement of nuisances on receipt of a preliminary notice. Seven statutory notices were issued, but no legal proceedings were taken.

Schools. — There are 5 public elementary schools with accommodation for over 2,600 children. The average number on the register in 1909 was 2,544, and of those attending 2,242.

The sanitary condition of these schools and the water supply were on the whole satisfactory, but there are classrooms in the West Street School where the lighting and ventilation might be improved and where, at times, owing to the arrangement of the classes for teaching, overcrowding occurs.

The playground at Benhilton requires asphalting; its present condition results in much dirt being carried on the children's feet to the classrooms.

On the notification of infectious disease, if any member of the family attends school, the school is visited and necessary examination made of children and instruction given to teachers.

By arrangement with the County Education Medical Officer examinations of children are made for contagious diseases and school-attendance purposes.

School Closure.—No school was closed by order of the Sanitary Authority, but the Managers closed two infant schools from February 16th to March 6th, two from March 1st to 6th, and finally all departments of all the elementary schools (except one near the Downs and away from the

town) from March 3rd to 8th, owing to the prevalence of measles, whooping cough, and influenza.

Factory and Workshops Act.—The number of workshops on the register at the end of the year was 127, and 253 visits of inspection were made. The various premises were generally found to be in a satisfactory condition. The following list gives the various industries as carried on at the registered workshops :—

Bakehouses - - - -	14
Laundries - - - -	18
Dressmakers and Milliners -	28
Tailors, Outfitters, Watchmakers, Bootmakers, and others -	67

Bye-Laws Relating to New Streets and Buildings.—The table and two succeeding paragraphs are from the department of Mr. C. Chambers Smith, the District Surveyor and Engineer :—

	In 1899	In 1900	In 1901	In 1902	In 1903	In 1904	In 1905	In 1906	In 1907	In 1908	In 1909
The number of new buildings, and of additions to buildings, of which plans were submitted for approval under the Bye-Laws, was.....	257	153	201	174	192	171	355	223	175	142	119
The number of new streets, ditto, was...	5	2	3	1	4	5	2	2	3	2	
The number of times that legal proceedings were taken for breach of the Bye-laws relating to streets and buildings was.....	1	none	none	none	none	none	none	none	none	none	none

The number of private streets metalled, channelled, paved, etc., under the Private Street Works Act, 1892, during 1909 was 8.

House Drainage, &c.—The drains of 131 premises were connected with the sewers of the district during the year.

THE SANITARY INSPECTOR'S REPORT

For the Year ending December 31st, 1909.

Number of complaints received in writing -	114
Number of premises inspected under Sec. 92 of the Public Health Act, 1875 - - -	410
Number of nuisances discovered - - -	315
Ditto remedied without being reported - - - - - - -	28
Number of nuisances reported to the Sanitary Authority - - - - - - -	287
Number of nuisances remedied after report -	274
Number of preliminary notices served by the Inspector for the abatement of nuisances -	143
Number of notices for the abatement of nuisances served by order of the Sanitary Authority -	7

Particulars of Work done by owners or occupiers for the abatement of nuisances, in compliance with notices.

Number of privies, cesspools, ditches, pools, water courses, urinals, ashpits, and drains, *cleansed*, and number of deposits *removed* -	64
Number of new privies or water-closets provided	—
Number of premises at which the drains were re-constructed, ventilated, trapped, or disconnected from the house pipes - - -	91
Number of houses at which the water closets were provided with water under Sec. 36 of the Public Health Act, 1875 - - -	—
Number of premises from which animals, improperly kept, were removed - - -	2
Number of houses which were provided with efficient ventilation - - - - -	2
Number of houses at which injurious overcrowding was abated - - - - -	3
Legal proceedings taken under Sec. 96 for abatement of nuisances (number of times) -	—
Houses closed as unfit for human habitation -	—

Number of houses at which disinfection was carried out, after notice under Sec. 5 of the Infectious Diseases (Prevention) Act, 1890 -	56
Number of foul houses cleansed and white-washed, after notice under Sec. 46 of the Public Health Act, 1875 - - - -	29
Number of premises from which offensive accumulations have been removed after notice, under Sec. 49 of the Public Health Act, 1875	21

Seizure of unwholesome meat, poultry, fish, fruit, vegetables, corn, bread, flour or milk, under Sec. 116 of the Public Health Act, 1875 -	6

F. W. KAIN, *Sanitary Inspector.*

The Inspector of Dairies, Cowsheds, & Milkshops makes the following return for the year 1909.

Number of registered cowkeepers, dairyman, and purveyors of milk carrying on business at the commencement of the year - - - -	24
Number since registered - - - - -	1
Number who gave up or transferred their business during the year - - - - - -	4
Number of registered premises inspected during the year - - - - - - - -	25
Total number of visits paid during the year - -	83
Number of cowsheds and dairies at which improvements in the lighting, ventilation, paving, drainage, means of cleaning, or water supply, were made during the year - - - -	2
Number of cowsheds or dairies which were found in a dirty state - - - - - - -	1
Number of premises at which the milk vessels were found in an unclean state - - - -	1
Number of new cowsheds erected - - - -	—

METEOROLOGICAL NOTES, 1909.

	January.	February.	March.	April.	May.	June.	July.	August.	Septemb'r.	October.	November.	December.	Total for year 1909.	Total for year 1908.	Total for year 1907.	Total for year 1906.	Total for year 1905.
Rainfall (inches) as recorded at— Sutton Sewage Works ..	·76	·65	4·04	1·61	1·40	4·02	2·69	2·13	2·99	4.25	·91	2·86	28·31	24·96	22·88	22·72	23·61
Hours of sunlight .. .. (recorded at Wallington)	46·4	62·5	60·9	218·5	288·9	93·0	164·9	210·1	101·9	84·8	70·1	45·4	1447·4	1581·5	1381·9	1673·6	1582·5
Mean temperature .. (recorded at Wallington)	38·2	36·6	39·0	49·2	52·3	54·3	60·4	62·1	55·0	52·9	41·2	40·1	Aver. 48·4	Aver. 49.8	Aver. 49·4	Aver. 50.5	Aver. 49·8

RAINFALL FOR 1909
AT
SUTTON SEWAGE FARM,
As compared with that of previous ten years.

Year.	Total Depth.	Greatest Fall in 24 Hours		Number of Days upon which ·01 or more fell.
		Depth.	Date.	
1899	22·76 Inches.	1·50 Inches.	Nov. 5th.	140
1900	24·21 do.	·90 do.	Feb. 15th.	165
1901	21·27 do.	1·12 do.	Dec. 12th.	144
1902	21·03 do.	·97 do.	Sept. 10th.	183
1903	37·64 do.	1·78 do.	June 10th.	190
1904	22·89 do.	·82 do.	Dec. 6th.	184
1905	23·61 do.	1·12 do.	June 6th.	177
1906	22.72 do.	1·98 do.	June 28th.	162
1907	22·88 do.	·90 do.	April 6th.	180
1908	24·96 do.	1·10 do.	Jan. 7th.	165
Average	24·40 do.	1·22 do.		169
1909	28·31 do.	1.10 do.	Oct. 28th.	181

SUMMARY OF METEOROLOGICAL NOTES SUPPLIED BY F. CAMPBELL-BAYARD, Esq., F.R.Met.Soc.,

Honorary Secretary of the Croydon Natural History and Scientific Society.

January.—First three weeks mild, last week cold. Very dry, rainfall an inch below the average. Mean temperature slightly below the average. Sunshine 1 per cent. above the average of the 20 years 1886—1905.

February.—First week mild, then cold and frosty. Very dry, rainfall 40 per cent. below average. Considerable snowfall. Keen north-east winds. Mean temperature 2·75 degrees and sunshine 1 per cent. below average.

March.—First week very cold with snow and frost. Warmer in latter half of month. The coldest March since 1900 and the wettest since 1907, there being 26 rainy days. Mean temperature 3·2 degrees below average. Sunshine 14 per cent below average.

April.—First 11 days brilliantly sunny with cold nights, then heavy rain, snow and sleet. Rainfall and temperature a little above the average, and sunshine 15 per cent. above.

May.—Opened with snow showers. From 2nd to 12th bright sunshine with cold north-east winds. Then four days very cold with snow showers, again followed by bright sunshine, with shade temperatures reaching 80 degrees until 24th, when weather became showery. The mean temperature was very slightly below and the sunshine 19 per cent. above the average, and the highest May value recorded.

June.—The coldest and most sunless June for 33 years; 20 rainy days. The mean temperature on June 11th was lower than on January 11th. Prevailing wind northerly. Rainfall an inch above and mean temperature 5 degrees below average. Sunshine 22 per cent. below average.

July.—Cold, wet and sunless; very windy. Rainfall nearly $\frac{3}{4}$ inch above average and mean temperature 2·5 degrees below. Sunshine 11 per cent. below average.

August.—From 4th—15th warm and dry, 16th—25th cool, cloudy, and rainy, afterwards rather cold. Rainfall from $\frac{1}{4}$—1 inch and mean temperature 0·5 degrees above average. Sunshine 2 per cent. above average.

September.—Very wet, cold, and sunless; the wettest since 1881; since 1886 there have been only two colder and two more sunless Septembers. Rainfall 25—50 per cent. above, mean temperature 2·5 degrees below, and sunshine 12 per cent. below average.

October.—Very wet, especially at close. First three weeks very warm. Rainfall 50 per cent. above, mean temperature 3 degrees above, and sunshine 5 per cent. below average.

November.—Cold, sunny, dry, and foggy. Rainfall only 39 per cent. of the average. Mean temperature 3 degrees below and sunshine 7 per cent. above average.

December.—Warm, wet, and very changeable. The number of rainy days has not been surpassed, the rainfall being from $\frac{1}{2}$—1 inch above average. The mean temperature 1—0·4 degrees and sunshine 3 per cent. above average of 20 years 1886—1905.